DETAILED ACTION

Response to Arguments

Applicant's arguments filed 3/17/2010 have been fully considered but they are not persuasive.

With regard to applicant's argument that the combination of the Weinfurtner et al and Cheng references fail to disclose setting the parameters for electronic circuitry in a second hearing aid that is to replace a first hearing aid. The applicant argues that the motivation for combining the above references is hindsight. The examiner argues that the Weinfurtner et al reference teaches a system where a control module 40 (*Weinfurtner et al, fig. 1: 40*), external to a hearing aid, is utilized to set the parameters of a hearing aid. Weinfurtner further discloses that there could be another hearing aid (*Weinfurtner et al, fig. 2*), where the parameters could be set by control module 40. However, Weinfurtner did not explicitly disclose the parameters being set in one hearing aid could also be the same parameters set in another hearing aid device. However, Cheng discloses a UPnP message enabling device (*Cheng, fig. 1: 200, 120; para 0022*). A UPnP message enabling device is capable of preprocessing in one device and sending that preprocess to another device where it can be executed. For instance, a noise compensation algorithm in one computer could be sent to another computer where the noise compensation algorithm can be utilized and executed the same way it was in the previous computer. Based on the above analysis, the combination of the Weinfurnter et al and Cheng references is not hindsight.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 21-22, 24-27 & 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinfurtner et al, US Patent 6035050, in view of Cheng, US Patent Pub. 20020078161 A1.

4. Re Claim 21, Weinfurtner et al discloses a method to automatically adjust a new hearing aid, comprising the steps of: temporarily bringing a first hearing aid, having an acoustic input and an acoustic output and that has been worn by a hearing-impaired person, into active communication with a measurement device that is a separate device from, and is external to, said first hearing aid (*fig. 1: 20 & 40; col. 2, lines 4-37*); from a processor, operating said measurement device to obtain, by said active communication with said first hearing aid, a detected operational characteristic of said first hearing aid that represents overall operation of said first hearing aid between said acoustic input

and said acoustic output of said first hearing aid (*figs. 1 & 4; col. 5, lines 14-26: the hearing aid communicated its parameters to the controller via the two-way bidirectional communication means*); supplying said operational characteristic of said first hearing aid from said measurement device to said processor and, in said processor, automatically analyzing said operational characteristic of said first hearing aid to obtain an analysis result (*figs. 1-2 & 4; col. 5, lines 14-26: the hearing aid communicated its parameters to the controller via the two-way bidirectional communication means*); setting parameters for electronic circuitry in a second hearing aid (*fig. 2: the control module 40 could also set parameters for a second hearing aid*); but fails to explicitly disclose automatically determining, from said analysis result of the first hearing aid, setting parameters for electronic circuitry in a second hearing aid that is to replace said first hearing aid as a new hearing aid to be worn by said hearing impaired person, temporarily placing said second hearing aid in active communication with a setting device that is connected to said processor and that is a separate device from, and is external to, said second hearing aid; and from said processor, setting said electronic circuitry in said second hearing aid with said setting parameters via said active communication between said setting device and said second hearing aid. However, the Cheng reference disclose a UPnP enabling device (*Cheng, fig. 1: 200*) along with a UPnP controller (*Cheng, fig. 1: 120*) where the devices that are not UPnP compatible are made UPnP compatible, thus enabling a message to be sent by one device to another via the UPnP controller requesting a particular service being done by that device to be carried out after which the results are communicated back to the requesting device via the UPnP controller

(*Cheng, para 0022*). A UPnP message enabling device is capable of preprocessing in one device and sending that preprocess to another device where it can be executed. For instance, a noise compensation algorithm in one computer could be sent to another computer where the noise compensation algorithm can be utilized and executed the same way it was in the previous computer. Therefore, it would have been obvious to implement a UPnP enabler and controller such that when a user is using the secondary auxiliary hearing aid (*Weinfurtner et al, fig. 2*), he/she can still have access to the parameters that were set when the first auxiliary hearing aid (*Weinfurtner et al, fig. 1: 20*) was being used in contact with the controller 40 (*Weinfurtner et al, fig. 1: 40*) in such a manner that the controller 40 does not need to be in the immediate vicinity of the secondary auxiliary hearing aid (*Weinfurtner et al, fig. 2*) thus providing a more convenient and dynamic hearing aid system.

Re Claim 22, the combined teachings of Weinfurtner et al and Cheng disclose a method as claimed in claim 21 wherein said first hearing aid has a memory in which setting parameters for electronic circuitry in said first hearing aid are stored, and wherein the step of obtaining said operational characteristic from said first hearing aid comprises reading out said setting parameters from said memory of said first hearing aid and supplying said setting parameters read from the memory of the first hearing aid to said processor (*Weinfurtner et al, figs. 4: 32, 34; col. 5, lines 14-26: the hearing aid communicated its parameters to the controller via the two-way bidirectional communication means*), and wherein said second hearing aid has a memory connected to said electronic circuitry of said second hearing aid, and wherein the step of setting

said electronic circuitry in said second hearing aid with said setting parameters determined from said operational characteristic of said first hearing aid comprises entering the setting parameters read from said memory of said first hearing aid into said memory of said second hearing aid (*Weinfurtner et al, figs. 4: 32, 34; col. 5, lines 14-26: the hearing aid communicated its parameters to the controller via the two-way bidirectional communication means*).

Re Claim 24, the combined teachings of Weinfurtner et al and Cheng disclose a method as claimed in claim 21 wherein said measurement device is a first measurement device, and comprising placing said second hearing aid in active communication with a second measurement device, and operating said second measurement device from said processor to obtain an operational characteristic representing overall operation of said second hearing aid between an acoustic input thereof and an acoustic output thereof (*Cheng, fig. 1: 120, 200 para 0022: the seond auxiliary hearin aid of Weinfurtner et al is in communication with a plurality of devices that include an UPnP enabler and UPnP controller*).

Claims 25-26 & 30 have been analyzed and rejected according to claim 21.

Claim 27 has been analyzed and rejected according to claim 22.

Claim 29 has been analyzed and rejected according to claim 24.

1. Claims 23 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinfurtner et al, US Patent 6035050 and Cheng, US Patent Pub. 20020078161 A1 as

applied to claim 21 above, and further in view of Shennib, US Patent 5825894. (The Shennib reference is cited in IDS filed 3/27/2006).

Re Claim 23, the combined teachings of Weinfurtner et al and Cheng disclose a method as claimed in claim 21 wherein said measurement device comprises a speaker and a microphone, and wherein the step of obtaining said operational characteristic of said first hearing aid comprises emitting an acoustic signal from said speaker into said acoustic input of said first hearing aid and detecting an acoustic signal with said microphone from said acoustic output of said first hearing aid (*figs. 1 & 4; col. 5, lines 14-26*); but fails to disclose wherein the step of automatically analyzing said operational characteristic of said first hearing aid comprises automatically identifying, as said analysis result, a transfer function of said first hearing aid, between said acoustic input and said acoustic output, as a ratio of said signal supplied to said acoustic input of said first hearing aid and said signal emitted from said acoustic output of said first hearing aid. However, Shennib discloses a hearing aid that is capable of analyzing input signals and generating an ear canal transfer function for the user (*Shennib, abstract*). Therefore it would have been obvious to modify the hearing aids of Weinfurtner et al with the ability to determine an ear canal transfer function as taught in Shinnib (*Shennib, abstract*) for the purpose of providing measurements that are directly correlated across all phases of hearing assessment.

Claim 28 has been analyzed and rejected according to claim 23.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE MONIKANG whose telephone number is (571)270-1190. The examiner can normally be reached on 9:00-5:00 EST Monday-Friday, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/G. M./ 4/12/2010
Examiner, Art Unit 2614

/Vivian Chin/
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